IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.:	10/719,981	Examiner	Murdough, Joshua
Applicant:	Hug, Joshua, et al.	Group Art Unit:	3621
Filed:	November 21, 2003	Atty. Docket No.:	108417.00081
Title:	Digital Rights Management for Content Rendering on Playback Devices		

DECLARATION UNDER 37 CFR 1.131

I, the undersigned, Joshua D. Hug, as a joint inventor of the invention claimed in application 10/719,981 (the "subject application" filed on November 21, 2003), and all claims contained therein, do hereby declare that:

1. Being hereby warned that willful false statements are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any resulting Letters Patent issuing thereon, I state that all statements made of my own knowledge are true and all statements made on information and belief are believed to be true.

2. The subject application was filed on November 21, 2003.

3. Development, conception, and reduction to practice of the invention claimed in the subject application, and the activities described in this declaration, took place in the Unites States of America.

4. The subject application, as filed, included thirty-one claims.

5. Of the thirty-one pending claims, nine claims (i.e., claims 1, 15, 22, 26, 27, 28, 29, 30, and 31) are independent claims and twenty-two claims (i.e., claims 2-14, 16-21 and 23-25) are dependant claims.

6. CONCEPTION:

7. The subject matter claimed in the subject application was conceived prior to July 5, 2003.

8. Prior to July 5, 2003, the invention claimed in the subject application was disclosed in an Invention Disclosure Form. A true and accurate copy of the Invention Disclosure Form is attached as Exhibit A, except that the copy has been redacted to remove all references to dates. The Invention Disclosure Form (i.e., Exhibit A) evidences the conception of the invention claimed in the subject application, which occurred prior to July 5, 2003.

9. Claim 1 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 1. In a client device, a method comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Obtain a new device"; "Register device with a DMS"; "play the media consuming the intrinsic rights the device has").
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> receiving a request for playback of digital audio or video content stored on the device; (See *Id.*: "Play the media consuming the intrinsic rights the device has")
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> determining an allotted playback duration for the device[.] (See *Id.*: "The most common and maybe the only set of rights that a device will acknowledge will be playback time . . .Devices will be created with a pre-determined number of allowed playback hours")
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> determining an elapsed playback duration for the device, the elapsed playback duration representing an amount of time previously consumed by the device while rendering digital audio or video content[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").
>
> determining whether a predetermined relationship between the elapsed playback duration and the allotted playback duration for the device is satisfied[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their

rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

regulating playback of at least the requested digital audio or video content if the predetermined relationship between the elapsed playback duration and the allotted playback duration for the device is determined to be satisfied. (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

10. Claim 2 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

2. The method of claim 1, wherein the request for playback of digital audio or video content is received via a user input device. (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Obtain a new device"; "Register device with a DMS"; "play the media consuming the intrinsic rights the device has"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

11. Claim 4 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

4. The method of claim 1, wherein playback of the requested digital audio or video content track is denied if it is determined that the relationship between the allotted playback duration and elapsed playback duration is satisfied. (See Exhibit A § 1: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed

playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

12. Claim 5 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 5. The method of claim 4, further comprising: facilitating playback of the digital audio content if it is determined that the elapsed playback duration does not exceed the allotted playback duration. (See Exhibit A § 1: "Play the media consuming the intrinsic rights the device has").

13. Claim 6 was conceived prior to July 5, 2003. Claim 6 recites:

> 6. The method of claim 4, further comprising: indicating to the user at least one of the elapsed playback duration and the allotted playback duration.

Although Exhibit A does not explicitly disclose indicating playback durations to a user, the concept of indicating playback durations to a user was contemplated and conceived by the inventors prior to July 5, 2003.

14. Claim 7 was conceived prior to July 5, 2003. Claim 7 recites:

> 7. The method of claim 4, further comprising: indicating to the user the elapsed playback duration in relation to the allotted playback duration.

Although Exhibit A does not explicitly disclose indicating to the user the elapsed playback duration in relation to the allotted playback duration, the concept of indicating to the user the elapsed playback duration in relation to the allotted playback duration was contemplated and conceived by the inventors prior to July 5, 2003.

15. Claim 8 was conceived prior to July 5, 2003. Claim 8 recites:

8. The method of claim 7, wherein the digital audio or video content is encoded in accordance with at least one of an advanced audio encoding algorithm, and adaptive multi-rate encoding algorithm, and an MP3 encoding algorithm.

Although Exhibit A does not explicitly disclose that the digital audio or video content is encoded, the concept of the audio of video content being encoded was contemplated and conceived as part of the invention by the inventors prior to July 5, 2003.

16. Claim 9 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

9. The method of claim1, further comprising: denying playback of the requested digital audio or video content if the elapsed playback duration added to a run length associated with the requested content exceeds the allotted playback duration. (See Exhibit A § 1: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

17. Claim 10 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

10. The method of claim 1, further comprising: denying playback of additional digital audio or video content stored on the device in addition to the requested digital audio or video content if it is determined that the elapsed playback duration is equal to or exceeds the allotted playback duration. (See Exhibit A § 1: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-

charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

18. Claim 11 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

11. The method of claim 1, wherein the allotted playback duration is determined based upon predetermined rights associated with the device. (See Exhibit A § 1: "Devices will be created with a pre-determined number of allowed playback hours").

19. Claim 12 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

12. The method of claim 1, wherein the allotted playback duration is determined based upon data received from the content rights server. (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "At some point either automatically or at the users request, the device will be issued a refresh token"; "If the user refuses to refresh/recharge their device, does not connect their device to a DMS, cancels their subscription to their DMS . . . the device will refuse to playback the user's subscription content").

20. Claim 13 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

13. The method of claim 1, further comprising: periodically increasing the allotted playback duration prior to the allotted playback duration exceeding the elapsed playback duration. (See Exhibit A § 1: "At some point either automatically or at the users request, the device will be issued a refresh token").

21. Claim 14 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 14. The method of claim 10, wherein the allotted playback duration is increased based upon entitlements granted to the user by a service provider. (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "At some point either automatically or at the users request, the device will be issued a refresh token"; "If the user refuses to refresh/recharge their device, does not connect their device to a DMS, cancels their subscription to their DMS . . . the device will refuse to playback the user's subscription content").

22. Claim 15 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 15. In a digital content rendering device, a method comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Obtain a new device"; "Register device with a DMS"; "play the media consuming the intrinsic rights the device has").
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> rendering one of a plurality of audio or video content items[.] (See *Id.*: "Play the media consuming the intrinsic rights the device has")
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> determining an elapsed playback duration for which digital audio or video content has been rendered[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").
>
> regulating further content rendering by the digital content rendering device if the elapsed playback duration satisfies a predetermined relationship with respect to an allotted playback duration. (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-

determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

23. Claim 16 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 16. The method of claim 15, wherein the elapsed playback duration represents an amount of time for which content has been rendered by the digital content rendering device. (See Exhibit A § 1: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged")

24. Claim 18 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 18. The method of claim 15, wherein regulating comprises denying further content rendering by the digital content rendering device if the elapsed playback duration satisfies a predetermined relationship with respect to the allotted playback duration. (See Exhibit A § 1: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

25. Claim 19 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

19. The method of claim 15, wherein the allotted playback duration represents at least one of an amount of render time for which content may be rendered on the digital content rendering device, and a quantity of data that may be processed by the digital content rendering device to render content on the device. (See Exhibit A § 1: "The most common and maybe the only set of rights that a device will acknowledge will be playback time . . .Devices will be created with a pre-determined number of allowed playback hours")

26. Claim 20 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

20. The method of claim 19, further comprising: facilitating playback of the digital audio content if it is determined that the elapsed playback duration does not exceed the amount of render time corresponding to allotted playback right. (See Exhibit A § 1: "Play the media consuming the intrinsic rights the device has").

27. Claim 22 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

22. In a digital content rendering device, a method comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Obtain a new device"; "Register device with a DMS"; "play the media consuming the intrinsic rights the device has").

identifying a playback right associated with the digital content rendering device representing an allotted measure of digital audio or video content that may be rendered by the digital content rendering device[.] (See *Id.*: "The most common and maybe the only set of rights that a device will acknowledge will be playback time . . .Devices will be created with a pre-determined number of allowed playback hours").

determining whether the allotted measure of content has been rendered by the device[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

preventing further content rendering on the digital content rendering device if it is determined that the allotted measure of digital audio or video content that may be rendered by the digital content rendering device has previously been rendered by the device. (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

28. Claim 23 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

23. The method of claim 22, wherein the allotted measure of digital audio or video content that may be rendered represents an amount of time that the digital content rendering device may render the digital audio or video content. (See Exhibit A § 1: "The most common and maybe the only set of rights that a device will acknowledge will be playback time[.]" . . .Devices will be created with a pre-determined number of allowed playback hours").

29. Claim 24 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

24. The method of claim 22, wherein the playback right associated with the digital content rendering device is further associated with a user, and wherein the user is denied playback of any additional content items by the digital content rendering

device once it is determined that the allotted measure of digital audio or video content that may be rendered by the digital content rendering device has previously been rendered by the device. (See Exhibit A § 1: "At some point either automatically or at the users request, the device will be issued a refresh token"; "If the user refuses to refresh/recharge their device, does not connect their device to a DMS, cancels their subscription to their DMS . . . the device will refuse to playback the user's subscription content").

30. Claim 25 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 25. The method of claim 24, wherein the playback right is determined based upon a subscription agreement between the user and a content provider. (See Exhibit A § 1: "At some point either automatically or at the users request, the device will be issued a refresh token"; "If the user refuses to refresh/recharge their device, does not connect their device to a DMS, cancels their subscription to their DMS . . . the device will refuse to playback the user's subscription content").

31. Claim 26 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

> 26. A digital content rendering apparatus comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Obtain a new device"; "Register device with a DMS"; "play the media consuming the intrinsic rights the device has").
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> a storage medium having stored thereon programming instructions designed to enable the apparatus to[.] (See *Id.*: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions

stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

receive a request for playback of digital audio or video content stored on the apparatus[.] (See *Id.*: "Play the media consuming the intrinsic rights the device has").

determine an allotted playback duration for the apparatus[.] (See *Id.*: "The most common and maybe the only set of rights that a device will acknowledge will be playback time . . .Devices will be created with a pre-determined number of allowed playback hours").

determine an elapsed playback duration for the apparatus, the elapsed playback duration representing an amount of time previously consumed by the apparatus while rendering digital audio or video content[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

determine whether a predetermined relationship between the elapsed playback duration and the allotted playback duration for the apparatus is satisfied[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

regulate playback of at least the requested digital audio or video content if the predetermined relationship between the elapsed playback duration and the allotted playback duration for the apparatus is determine to be satisfied[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours.

After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

at least one processor coupled with the storage medium to execute the programming instructions. (See *Id.*: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

32. Claim 27 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

27. A digital content rendering apparatus comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Obtain a new device"; "Register device with a DMS"; "play the media consuming the intrinsic rights the device has").

a storage medium having stored therein programming instructions designed to enable the apparatus to[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

render one of a plurality of audio or video content items[.] (See *Id.*: "Play the media consuming the intrinsic rights the device has")

determine an elapsed playback duration for which digital audio or video content has been rendered[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

regulate further content rendering by the digital content rendering apparatus if the elapsed playback duration satisfies a predetermined relationship with respect to an allotted playback duration[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

at least one processor coupled with the storage medium to execute the programming instructions. (See *Id.*: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

33. Claim 28 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

28. A digital content rendering apparatus comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Obtain a new device"; "Register device with a DMS"; "play the media consuming the intrinsic rights the device has").

a storage medium having stored thereon programming instructions designed to enable the digital content rendering apparatus to[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

identify a playback right associated with the digital content rendering apparatus representing an allotted measure of digital audio or video content that may be rendered by the digital content rendering apparatus[.]

determine whether the allotted measure of content has been rendered by the apparatus[.] (See *Id.*: "The most common and maybe the only set of rights that a device will acknowledge will be playback time . . .Devices will be created with a pre-determined number of allowed playback hours")

prevent further content rendering on the digital content rendering apparatus if it is determined that the allotted measure of digital audio or video content that may be rendered by the digital content rendering apparatus has previously been rendered by the apparatus[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to

recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

at least one processor coupled with the storage medium to execute the programming instructions. (See *Id.*: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

34. Claim 29 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

29. A machine readable medium having stored thereon machine executable instructions, the execution of which to implement a method comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device (b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

receiving a request for playback of digital audio or video content stored on the device[.] (See *Id.*: "Play the media consuming the intrinsic rights the device has").

determining an allotted playback duration for the device[.] (See *Id.*: "The most common and maybe the only set of rights that a device will acknowledge will be

playback time . . .Devices will be created with a pre-determined number of allowed playback hours").

determining an elapsed playback duration for the device, the elapsed playback duration representing an amount of time previously consumed by the device while rendering digital audio or video content[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

determining whether a predetermined relationship between the elapsed playback duration and the allotted playback duration for the device is satisfied[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

regulating playback of at least the requested digital audio or video content if the predetermined relationship between the elapsed playback duration and the allotted playback duration for the device is determined to be satisfied. (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

35. Claim 30 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

30. A machine readable medium having stored thereon machine executable instructions, the execution of which to implement a method comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device

(b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

rendering one of a plurality of audio or video content items[.] (See *Id.*: "Play the media consuming the intrinsic rights the device has").

determining an elapsed playback duration for which digital audio or video content has been rendered[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

regulating further content rendering by the digital content rendering device if the elapsed playback duration satisfies a predetermined relationship with respect to an allotted playback duration. (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

36. Claim 31 was conceived prior to July 5, 2003, as shown by Exhibit A. The following mapping of the claim elements to Exhibit A is an example of how Exhibit A shows conception of the claim:

31. A machine readable medium having stored thereon machine executable instructions, the execution of which to implement a method comprising[.] (See Exhibit A § 1: "There are two primary actors involved in this invention, (a) device

(b) digital media service (DMS)"; "Any communication medium should be usable: WiFi, WAN, GPRS, Lan, USB, 1394, SMS, MMS etc.") (Although Exhibit A does not explicitly disclose programming instructions stored on a storage medium or executed by a processor, the inventors assert that at the time of conception, the inventors contemplated and conceived a software embodiment of the invention, which included programming instructions stored on a storage medium and executed by a processor, i.e. software stored in a memory).

identifying a playback right associated with the digital content rendering device representing an allotted measure of digital audio or video content that may be rendered by the digital content rendering device[.] (See *Id.*: "The most common and maybe the only set of rights that a device will acknowledge will be playback time . . .Devices will be created with a pre-determined number of allowed playback hours").

determining whether the allotted measure of content has been rendered by the device[.] (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged").

preventing further content rendering on the digital content rendering device if it is determined that the allotted measure of digital audio or video content that may be rendered by the digital content rendering device has previously been rendered by the device. (See *Id.*: "When these rights are used up, the device will require users to recharge their rights"; "Devices will be created with a pre-determined number of allowed playback hours. After that time has passed, the devices will refuse to play content until they are re-charged"; "If a user refuses to recharge/refresh their device . . . the device will refuse to playback the user's subscription content").

37. REDUCTION TO PRACTICE

38. Diligent pursuit of actual reduction to practice of the invention claimed in the subject application began prior to July 5, 2003, and continued, without lapse, through the subject application filing date of November 21, 2003.

39. Exhibits B through I show that employees of RealNetworks, Inc. ("RealNetworks") continued to work on implementing the claimed invention and other features which, although not directly claimed in the subject application, were required in order to implement the claimed invention.

40. Exhibits B through I reference the Orange Protocol. "Orange" is a code name that was used by employees of RealNetworks to refer to the portions of the Helix Device DRM project which included work on necessary prerequisites for the invention claimed in the subject application. Other portions of the Helix Device DRM project implemented the invention claimed in the subject application after the necessary prerequisites had been implemented.

41. The Orange Protocol is a licensing protocol based on user subscriptions and allotted playback-time based on user subscriptions, as opposed to traditional content licensing models where licensing is based on media content or media files. The base components of the Orange Protocol are components that send an authenticated subscription or playback-time license to a device in a flexible and secure manner.

42. In order to implement the claimed invention, it was necessary to first implement the base components of the Orange Protocol because a) the base components facilitate secure, authenticated transmission of messages to the device, a necessary prerequisite for services that interact with devices in the embodiment of the claimed invention we were reducing to practice, and b) the base components provide the basic building blocks of a subscription or user-account subscription license, which is a necessary prerequisite to tracking allocation of elapsed playback time by the user-account in the embodiment of the claimed invention we were reducing to practice.

43. A true and accurate copy of an email dated June 20, 2003 is attached as Exhibit B. The email is from Alain Hamel, a RealNetworks employee who worked on implementing

the Orange Protocol. The email is addressed to Adam Cappio, a RealNetworks employee who worked on the Orange Protocol either directly or indirectly. The "Original Message" listed in the email is another email from Rahul Agarwal, a RealNetworks employee, to other RealNetworks employees who worked on the Orange Protocol either directly or indirectly. I, Joshua Hug, a joint inventor of the subject application, am one of the recipients of the "Original Message." The email includes an attachment, Orange.doc Version 0.1, which is a draft document describing some features of the Orange Protocol. The email and the attachment show that employees of RealNetworks continued to work on and revise the Orange Protocol around the time of June 20, 2003. The date printed at the bottom corner of the exhibit (5/19/2009) is the date the document was printed by the Applicants' attorney.

44. A true and accurate copy of an email dated July 1, 2003 is attached as Exhibit C. The email is from Qiang Luo, a RealNetworks employee who worked on implementing the Orange Protocol. The email is addressed to employees of RealNetworks who worked on the Orange Protocol either directly or indirectly. I, Joshua Hug, a joint inventor of the subject application, am one of the recipients of the email. The email states "this is required for the Orange protocol." This email shows that employees of RealNetworks were communicating about and working on the Orange Protocol and the claimed invention around the time of July 1, 2003.

45. A true and accurate copy of an email dated July 16, 2003 is attached as Exhibit D. I, Joshua Hug, a joint inventor of the subject application, composed and sent the email. The email is addressed to RealNetworks employees who worked on the Orange Protocol either directly or indirectly. The email includes an attachment, Orange v.12.doc, which is a draft document describing some features of the Orange Protocol. The email and the attachment show that employees of RealNetworks continued to work on and revise the Orange Protocol and the claimed invention around the time of July 16, 2003. The date printed at the bottom corner of the exhibit (5/19/2009) is the date the document was printed by the Applicants' attorney.

46. A true and accurate copy of an email dated August 1, 2003 is attached as Exhibit E. The email is from Sheldon Fu, a RealNetworks employee who worked on the Orange Protocol. The email is addressed to employees of RealNetworks who worked on implementing the Orange Protocol either directly or indirectly. I, Joshua Hug, a joint inventor of the subject application, am one of the recipients of the email. The email states "Josh pointed out that our current Orange protocol is vulnerable to replay attack[.]" The email shows that other employees of RealNetworks and I were working on the Orange Protocol and the claimed invention around the time of August 1, 2003.

47. A true and accurate copy of an email dated August 2, 2003 is attached as Exhibit F. The email is from Sheldon Fu, a RealNetworks employee who worked on the Orange Protocol. The email is addressed to employees of RealNetworks who worked on implementing the Orange Protocol either directly or indirectly. I, Joshua Hug, a joint inventor of the subject application, am one of the recipients of the email. The email includes an attachment, Orange v.14a.doc, which is a draft document describing some features of the Orange Protocol. The email and the attachment show that other employees of RealNetworks and I continued to work on and revise the Orange Protocol and the claimed invention around the time of August 2, 2003. The date printed at the bottom corner of the exhibit (5/19/2009) is the date the document was printed by the Applicants' attorney.

48. A true and accurate copy of an email dated August 7, 2003 is attached as Exhibit G. I, Joshua Hug, a joint inventor of the subject application, composed and sent the email. The email is addressed to RealNetworks employees who worked on the Orange Protocol either directly or indirectly. The email includes two attachments, helix device DRM.vsd and Helix Device DRM v.21.doc, which are draft documents describing some features of the Helix Device DRM, also known as the Orange Protocol. The email and the attachment show that other employees of RealNetworks and I continued to work on and revise the Orange Protocol and the claimed invention around the time of August 7, 2003. The date printed at the bottom corner of the exhibit (5/19/2009) is the date the document was printed by the Applicants' attorney.

49. A true and accurate copy of an email dated August 15, 2003 is attached as Exhibit H. The email of August 15, 2003 included two PowerPoint™ file attachments, also included in Exhibit E. I, Joshua Hug, a joint inventor of the subject application, composed and sent the email. The PowerPoint attachments are presentations related to some features of the Helix Device DRM, also known as the Orange Protocol. The second attachment, titled "The Music Experience w/ Helix DRM," states:

- Designed to allow for the dynamic update of a group of licenses on a recurring basis

- As long as your subscription is current, you won't have to re-license your content.

The "subscription" referenced in the attachment is a discrete, rechargeable time period for which a user may play media, and is related to the allotted and elapsed playback times of the claims. For example, "Page 7" of the second attachment, titled "The Music Experience w/ Helix DRM," discusses that individual per-track music licenses are grouped into "subscriptions," that "[a]ccess to the group of licensing is provisioned and managed by a single parent "subscription" license," and states, "[a]s long as your subscription is current, you won't have to re-license your content." The next pages, "Page 8," "Page 9," and "Page 10," discuss "User Licensing" ("[s]ame benefits as Subscription licensing, plus much simpler portability and rights management"), also implemented by the Orange Protocol. The email and attachment show that other employees of RealNetworks and I were working on some features of the Helix Device DRM, also know as the Orange Protocol, around the time of August 15, 2003. The date printed at the bottom corner of the exhibit (September 30, 2008) is the date the document was printed by the Applicants' attorney.

50. A true and accurate copy of an email dated February 9, 2004 is attached as Exhibit I. I, Joshua Hug, a joint inventor of the subject application, composed and sent the email. The email is addressed to RealNetworks employees who worked on the Orange Protocol either directly or indirectly. The email includes an attachment, Helix Device DRM v.4.doc, which is a draft document describing some features of the Helix Device

DRM Protocol, which features included the Orange Protocol and the claimed invention. The email and the attachment show that other employees of RealNetworks and I continued to work on and revise the Orange Protocol and the claimed invention around the time of February 9, 2004. The email and attachment also show that other employees of RealNetworks and I continued to pursue actual reduction to practice of the claimed invention after the filing date of the subject application. The email and attachment also show the link between the base components of the Orange Protocol and the claimed invention. See e.g. Exhibit I §§ 3.1, 4.3, 4.4. The date printed at the top and bottom corners of the exhibit (5/19/2009) is the date the document was printed by the Applicants' attorney.
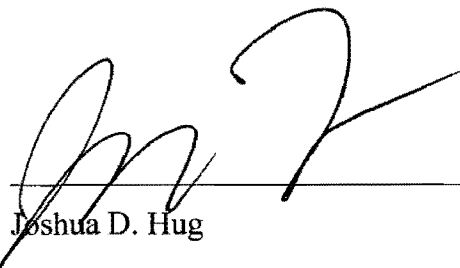
51. CONSTRUCTIVE REDUCTION TO PRACTICE

52. Constructive reduction to practice of the claimed invention occurred on November 21, 2003, when the subject application was filed with the United States Patent and Trademark office.

53. The Invention Disclosure Form (Exhibit A) and the emails (Exhibits B through I) also evidence the diligent pursuit of actual reduction to practice, which began prior to July 5, 2003, and continued through the November 21, 2003 filing date of the subject application.

7-1-09
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Date

Joshua D. Hug
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